

9. (New) The recombinant expression vector of claim 7, wherein said recombinant expression vector comprises the nucleotide sequence of SEQ ID NO:6.

10. (New) A host cell comprising the recombinant expression vector of claim 7.--

RESPONSE

I. Restriction Requirement

The Examiner has determined that the original claims are directed to six separate and distinct inventions under 35 U.S.C. § 121, as follows:

- Group I: Claims 1, 2 and 3 (in part), said to be drawn to an isolated nucleic acid encoding SEQ ID NO:2 including SEQ ID NO:1 and a recombinant expression vector comprising a sequence encoding SEQ ID NO:2, classified in class 435, subclass 320.1;
- Group II: Claim 3 (in part), said to be drawn to a recombinant expression vector comprising a sequence encoding SEQ ID NO:4, classified in class 435, subclass 320.1;
- Group III: Claim 4 (in part), said to be drawn to a substantially isolated protein having the amino acid sequence of SEQ ID NO:2, classified in class 530, subclass 350;
- Group IV: Claim 4 (in part), said to be drawn to a substantially isolated protein having the amino acid sequence of SEQ ID NO:4, classified in class 530, subclass 350;
- Group V: Claims 5 and 7, said to be drawn to an isolated polynucleotide comprising at least 24 contiguous nucleotides of SEQ ID NO:6 and a recombinant expression vector comprising a sequence encoding SEQ ID NO:7, classified in class 435, subclass 320.1; and
- Group IV: Claim 6, said to be drawn to a substantially isolated protein of SEQ ID NO:7, classified in class 530, subclass 350.

II. Response to Restriction Requirement

In response to the Restriction Requirement, Applicants hereby elect without traverse to prosecute

the claims of the Group V invention (claims 5 and 7), drawn to an isolated polynucleotide comprising at least 24 contiguous nucleotides of SEQ ID NO:6 and a recombinant expression vector comprising a sequence encoding SEQ ID NO:7, classified in class 435, subclass 320.1. Accordingly, claims 1-4 and 6 have been cancelled herein without prejudice and without disclaimer, as drawn to non-elected inventions.

Applicants reserve the right to refile claims to the non-elected inventions in one or more future applications retaining the priority date of the present case and the earlier cited priority applications.

III. Status of the Claims

Claims 1-4 and 6 have been cancelled without prejudice and without disclaimer as being drawn to non-elected inventions. No claims of the Group V invention have been cancelled. No claims of the Group V invention have been amended. New claims 8-10 have been added.

Claims 5 and 7-10 are therefore presently pending in the case. For the convenience of the Examiner, a clean copy of the pending claims is attached hereto as **Exhibit A**. In compliance with 37 C.F.R. § 1.121(c)(1)(ii), a marked up copy of the original claims is attached hereto as **Exhibit B**.

IV. Support for the Newly Added Claims

Claim 8 has been added to specifically recite a polynucleotide comprising the nucleotide sequence of SEQ ID NO:6. Support for this claim can be found throughout the specification as originally filed, with particular support being found at least in claim 5 as originally filed and in Section 5.1.

Claim 9 has been added to specifically recite a recombinant expression vector comprising the nucleotide sequence of SEQ ID NO:6. Support for this claim can be found throughout the specification as originally filed, with particular support being found at least in claim 7 as originally filed and from page 14, line 28 to page 15, line 1.

Claim 10 has been added to specifically recite host cells comprising the recombinant expression vectors of claim 7. Support for this claim can be found throughout the specification as originally filed, with particular support being found at least at page 15, lines 2-8.

It will be understood that no new matter is included within the newly added claims.

V. Inventorship

In response to the Examiner's reminder that, upon election of claims in response to the Restriction Requirement, inventorship must be amended in compliance with 37 C.F.R. § 1.48(b), Applicants respectfully request amendment of the inventorship of the present application under 37 C.F.R. § 1.48(b)(1) in order to remove an inventor of the non-elected claims, since his invention is no longer being claimed in the present application as amended. The inventor *that is requested to be removed* as a result of the cancellation of the non-elected claims as a result of the response to the Restriction Requirement is Nathaniel L. Wilganowski. The inventors of the remaining claims are, therefore, D. Wade Walke, John Scoville, and Brian Zambrowicz.

As set forth under 37 C.F.R. § 1.48(b)(2), the Commissioner is hereby authorized to charge the fee required under 37 C.F.R. § 1.17(i) for this amendment and request to correct inventorship to Deposit Account No. 50-0892.

VI. Conclusion

The present document is a complete response to the Restriction Requirement. Applicants believe that the claims of the instant application meet all of the conditions for patentability and are in condition for allowance. Accordingly, an early indication of the same is respectfully requested. Should Examiner Steadman have any questions or comments, or believe that certain amendments of the claims might serve to improve their clarity, a telephone call to the undersigned Applicants' representative is earnestly solicited.

Respectfully submitted,

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PATENT TRADEMARK OFFICE



Exhibit A

Clean Version of The Pending Claims in U.S. Patent Application Ser. No. 10/038,288

5. An isolated polynucleotide comprising at least 24 contiguous nucleotides from SEQ ID NO:6.
7. An isolated recombinant expression vector comprising a nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO:7.
8. (New) The isolated polynucleotide of claim 5, wherein said polynucleotide comprises the nucleotide sequence of SEQ ID NO:6.
9. (New) The recombinant expression vector of claim 7, wherein said recombinant expression vector comprises the nucleotide sequence of SEQ ID NO:6.
10. (New) A host cell comprising the recombinant expression vector of claim 7.

Exhibit B

Marked Up Version of Amended Claims in U.S. Patent Application Ser. No. 10/038,288

1. (Cancelled) An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1.
2. (Cancelled) An isolated nucleic acid molecule comprising a nucleotide sequence that:
 - (a) encodes the amino acid sequence shown in SEQ ID NO:2; and
 - (b) hybridizes under highly stringent conditions to the nucleotide sequence of SEQ ID NO:1 or the complement thereof.
3. (Cancelled) An isolated recombinant expression vector comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4.
4. (Cancelled) A substantially isolated protein comprising the amino acid sequence shown in SEQ ID NO:2 or SEQ ID NO:4.
5. An isolated polynucleotide comprising at least 24 contiguous nucleotides from SEQ ID NO:6.
6. (Cancelled) A substantially isolated protein comprising the amino acid sequence shown in SEQ ID NO:7, or processed form thereof.
7. An isolated recombinant expression vector comprising a nucleotide sequence encoding the amino acid sequence shown in SEQ ID NO:7.
8. (New) The isolated polynucleotide of claim 5, wherein said polynucleotide comprises the

nucleotide sequence of SEQ ID NO:6.

9. (New) The recombinant expression vector of claim 7, wherein said recombinant expression vector comprises the nucleotide sequence of SEQ ID NO:6.

10. (New) A host cell comprising the recombinant expression vector of claim 7.